

#### **401 KAR 55:010. Episode criteria.**

RELATES TO: KRS 224.20-100, 224.20-110, 224.20-120

STATUTORY AUTHORITY: KRS 224.10-100

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Environmental and Public Protection Cabinet to prescribe administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation defines those levels of pollutant concentrations which justify the proclamation of an air pollution alert, air pollution warning, and air pollution emergency.

Section 1. General. Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist whenever the cabinet determines that the accumulation of air contaminants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, present a threat to the health of the public. In making this determination, the cabinet shall be guided by the criteria specified in the following sections.

Section 2. Air Pollution Forecast. An internal watch by the cabinet shall be activated by a national weather service advisory that an atmospheric stagnation advisory or special dispersion statement is in effect.

Section 3. Alert. An alert level is that concentration of pollutants at which first stage control actions are to begin. An alert will be declared when any one (1) of the alert levels specified in Appendix A of this administrative regulation is reached at any monitoring site and meteorological conditions are such that the pollutant concentrations can be expected to remain at these levels for twelve (12) or more hours or increase, or in the case of ozone the situation is likely to recur within the next twenty-four (24) hours, unless control actions are taken.

Section 4. Warning. A warning level indicates that air quality is continuing to degrade and that additional control actions are necessary. A warning will be declared when any one (1) of the warning levels specified by Appendix A of this administrative regulation is reached at any monitoring site and meteorological conditions are such that pollutant concentrations can be expected to remain at these levels for twelve (12) or more hours or increase, or in the case of ozone the situation is likely to re-occur within the next twenty-four (24) hours, unless control actions are taken.

Section 5. Emergency. An emergency level indicates that air quality is continuing to degrade to a level that should never be reached and that the most stringent control actions are necessary. An emergency will be declared when any one (1) of the emergency levels specified in Appendix A of this administrative regulation is reached at any monitoring site and meteorological conditions are such that this condition can be expected to continue for twelve (12) or more hours or increase, or in the case of ozone, the situation is likely to reoccur within the next twenty-four (24) hours, unless control actions are taken.

Section 6. Termination. Any status declared by the application of these criteria will remain in effect until the criteria for that level are no longer met. At such time the next lower appropriate status will be assumed.

Section 7. An episode status based on the deterioration of air quality alone may be declared. An air stagnation advisory or special dispersion statement need not be in effect.

Section 8. An appropriate episode status shall be declared when any monitoring site records ambient air quality levels as designated in the episode criteria herein. The criteria shall be applied to individual monitoring sites and not to area wide air quality. (5 Ky.R. 378; Am. 999; eff. 6-6-79; 14 Ky.R. 1625; eff. 4-14-88; TAm eff. 8-9-2007.)

APPENDIX A TO 401 KAR 55:010 Episode Criteria			
POLLUTANT	EPISODE STATUS		
	ALERT	WARNING	EMERGENCY
Sulfur Dioxide			
24-hour average	800 $\mu\text{g}/\text{m}^3$ (0.3ppm)	1,600 $\mu\text{g}/\text{m}^3$ (0.6ppm)	2,100 $\mu\text{g}/\text{m}^3$ (0.8ppm)
Particulates, measured as $\text{PM}_{10}$ 24-hour average	350 $\mu\text{g}/\text{m}^3$	420 $\mu\text{g}/\text{m}^3$	500 $\mu\text{g}/\text{m}^3$
Carbon monoxide			
8-hour average	15ppm	30ppm	40ppm
Ozone			
1-Hour Average	0.2ppm	0.4ppm	0.5ppm
Nitrogen Dioxide			
1-Hour Average	1,130 $\mu\text{g}/\text{m}^3$ (0.6ppm)	2,260 $\mu\text{g}/\text{m}^3$ (1.2ppm)	3,000 $\mu\text{g}/\text{m}^3$ (1.6ppm)
24-Hour Average	282 $\mu\text{g}/\text{m}^3$ (0.15ppm)	565 $\mu\text{g}/\text{m}^3$ (0.3ppm)	750 $\mu\text{g}/\text{m}^3$ (0.4ppm)